

PRODUCT DATA SHEET

SikaTile®-410 Secure Set

A MULTI-PURPOSE SAND AND SILICA FREE WHITE TILE & STONE ADHESIVE WITH PATENTED DUSTLESS® TECHNOLOGY THAT REDUCES AIRBOURNE DUST DURING MIXING BY UP TO 80%.

DESCRIPTION

- SikaTile®-410 Secure Set is a multi-purpose premium sand & Silica free white tile and stone adhesive with patented DUST LESS® Technology that reduces airborne dust during mixing by up to 80% achieving improved air quality, better working conditions, less mess, and faster clean-up.
- SikaTile®-410 Secure Set is perfectly designed for most tile and stone applications including submerged applications and over under-floor heating systems.
- SikaTile®-410 Secure Set is exceptionally smooth and creamy to spread with high performance non slump capabilities for large format tile and stone applications.
- SikaTile®-410 Secure Set is extremely low in VOC, sand free, and contains no respirable crystalline silica making it safer to use than conventional sanded cement based tile adhesives.

USES

Suitable tile types include.

- Large format porcelain, ceramic and stone tiles
- Natural stone including marble, limestone, granite, sandstone, and slate, not suitable for moisture sensitive stone
- Terracotta
- Agglomerates / Terrazzo not sensitive to moisture
- Glass tile and glass mosaic
- Thin brick slip's

Suitable substrates include.

- 7-day old concrete
- Compressed cement boards
- Fibre cement sheet / Ceramic Tile Underlay
- Concrete masonry / rendered brick / blockwork
- Sika approved under tile waterproofing membranes
- Gypsum plasterboard (internal only)
- 24-hour old cement-based screeds and renders
- Autoclaved Aerated Concrete (AAC)
- Sika® approved acoustic underlayment's
- Under tile heating systems
- Tile over tile, with suitable Sika primer

Suitable areas of use include.

- Internal and external wall and floors in wet areas and submerged areas such as pools and spas
- Commercial and domestic internal and external wall and floor applications

FEATURES

- Patented DUST LESS® technology
- Silica free formulation
- AS ISO 13007 - C2TES1 Classification
- White adhesive, suitable for light and translucent stone
- Suitable for early age screeds (24-hours)
- Suitable for early age concrete (7-days)
- Exceptionally smooth and creamy to spread
- Suitable for under floor heating applications
- Non slump adhesive to assist in fixing large format tile and stone and minimising tile lippage
- Good early setting for grouting after 24 hours even in cold climates

PRODUCT INFORMATION

Product declaration	C2TES1 as per AS ISO 13007
Packaging	20kg bags / 64 bags per pallet
Shelf life	Unopened bags can be stored for up to 12 months in a cool, dry and

	weatherproof environment.
Storage conditions	Store in cool, dry conditions, off ground, out of direct sunlight. High humidity shall reduce shelf life.
Appearance and colour	White powder
Density	1.5 kg/L
Volatile organic compound (VOC) content	Low VOC - 7g/L (SCAQMD method 304-91)

APPLICATION INFORMATION

Mixing ratio	6.5 - 7 Litres of clean cool potable water per 20kg bag.	
Consumption	Notched trowel Size	Approximate coverage
	6mm	10m ²
	10mm	7m ²
	Coverage shall depend on surface planarity, substrate porosity, and application technique. Consumption to be treated as a guide only.	
Ambient air temperature	+5°C / +35°C	
Pot Life	2 hours	
Open Time	30 Minutes	
Adjustability time	Up to 30 minutes	
Applied product ready for use	USE	WAIT TIME
	Grouting	24 hours
	Light foot traffic	24 hours
	Wet area service	3 days
	Full traffic	5 Days
	Submerged applications - Pools & Spas	21 days prior to filling with water
	<i>Values determined in laboratory conditions at 23°C and 50% relative humidity. Higher temperatures will reduce wait times and lower temperature will increase wait times.</i>	

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- Do not apply in temperatures below 5°C or above 35°C.
- SikaTile®-410 Secure Set cannot be used directly over timber flooring, apply a suitable Ceramic Tile Underlay or reinforced screed prior to application.
- Not suitable for use with moisture sensitive stone.
- SikaTile®-410 Secure Set is not suitable for direct bonding of tiles over solvent based waterproofing membranes.
- Not suitable for tile over tile in submerged applications.
- Due to external influences efflorescence is beyond the control of the manufacturer.
- SikaTile®-410 Secure Set is not suitable for tile and stone with resinous, or other coatings on the base of

the tile or stone.

- "Silica Free" refers to the fact that the product is formulated with no sand hence there is no crystalline Silica present. SikaTile®-410 Secure Set is produced in an environment where contamination is possible through processing and packaging.
- For application externally above 3 metres use in conjunction with shelving angles or mechanical fixing systems.
- Contact Sika® Australia for uses not mentioned in this document.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

- Personal protective equipment
- Mixing pail
- Slow speed mixing drill with stirring attachment (max 500 rpm)
- Notched Trowel

SUBSTRATE QUALITY / PRE-TREATMENT

- All works shall be carried out in accordance with applicable Australian standards.
- All substrates shall meet minimum deflection standards outlined in the relevant Australian Standards.
- All substrates shall be free from loose friable materials, dust, debris, release agents, curing compounds, grease, sealers and other contaminating materials. Contaminated substrates must be mechanically prepared to expose at least 80% of the original substrate.
- Substrates shall be even and true to 5mm in 3m when measured from the highest point. For large format tiles greater than 600mm x 600mm, substrates shall be even and true to 1.5mm in 600mm to minimise tile lippage.
- For substrates that require a levelling compound use a suitable Sika® self-levelling underlayment.

CONCRETE SUBSTRATES:

New concrete shall be 7 days old and be left with a wood float finish.

Steel trowel finished concrete is generally acceptable if the concrete allows water penetration.

Concrete above 35Mpa shall be mechanically prepared.

CEMENT BOARD AND SHEETING:

All boards and sheets must be fixed in accordance with the manufacturer's instructions and specifically designed for tiling.

SCREEDS & MORTAR BEDS:

Sand cement screeds must be installed as per relevant Australian Standards and left for a minimum 24 hours prior to tiling. Screeds may need longer drying time in cold climates.

TILE ON TILE APPLICATIONS

Ensure all existing tiles are firmly fixed, loose or hollow tiles must be removed and the area repaired using a suitable repair mortar.

Existing tiles shall be adequately cleaned prior to the application of the primer.

Existing tiles shall be primed with SikaTile 015 NPP and allowed to dry prior to tiling.

SUBSTRATE PRIMING

<u>Application</u>	<u>Primer</u>
Porous & dense substrates	SikaTile 010 Secure Prime
Non porous substrates & tile on tile	SikaTile 015 NPP
Contaminated substrates / water based epoxy coatings	SikaTile 015 NPP

Refer to relevant pds for primers for additional information.

MIXING

Measure the recommended amount of clean potable water in a clean mixing pail, gradually add the SikaTile®-410 Secure Set powder mixing with the drill until it reaches a smooth lump free trowel-able consistency.

Allow the mix to stand / slake for 5 minutes then restir for an additional minute.

Remix without adding additional water during the adhesives pot life.

APPLICATION

- Tiles shall be fixed in accordance with Australian Standards.
- Ensure the back of tiles are free from dust and contaminants.
- Apply the adhesive with a notched trowel to the substrate to achieve minimum coverage requirement outlined in the relevant Australian Standards.
- Adhesive notches should be applied in a single direction.
- Apply tiles into the wet adhesive and break the adhesive notches to fully bed the tile in the adhesive layer. Ensure adequate coverage outlined in the Australian Standards is achieved to both substrate and the back of tiles.
- Tiles 400x400 and larger shall be back buttered as per relevant Australian Standards.
- Clean excess adhesive out of the grout joints while the adhesive is still wet.
- Expansion joints shall be installed as per relevant Australian Standards.

CLEANING OF EQUIPMENT

Tools and equipment can be cleaned with water prior to the adhesive setting. Adhesive that has set will require mechanical removal.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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Product Data Sheet

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